

California Regional Water Quality Control Board Central Valley Region

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TO:

Karen Larsen

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Program

FROM:

Chris Jimmerson

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Program

DATE:

21 May 2009

SUBJECT: 1 MARCH 2009 SEMI ANNUAL MONITORING REPORT - SAN JOAQUIN

COUNTY AND DELTA WATER QUALITY COALITION

On 2 March 2009, the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) received the San Joaquin County and Delta Water Quality Coalition (Coalition) 1 March 2009 Semi Annual Monitoring Report (SAMR). The time period discussed in the SAMR covers the irrigation season April 2008 through September 2008. This is the final SAMR report required pursuant to Monitoring and Reporting Program (MRP) Order No. R5-2005-0833. This Order has since been replaced by Order No. R5-2008-0005.

As of March 2009, the Coalition has fully transitioned the MRP to the new MRP Order (No. R5-2008-0005). Next year, the Coalition will prepare an Annual Monitoring Report in accordance with Order No. R5-2008-0005 by 1 March 2010 that will include the reporting period October 2008 through December 2009. The Coalition has expressed some concerns about the reporting period because the laboratory results from the December monitoring event may not be delivered to the Coalition until late January. The Coalition stated in a May 2009 meeting that this would only give them one month to compile and evaluate the data to meet next year's 1 March report deadline.

In this memorandum, staff presents their comments pursuant to the Order No. R5-2005-0833, and its MRPP. The section titles are the same as the titles used in the SAMR Checklist (see attached). Staff derived the checklist directly from the Order. Staff used the checklist to verify that the content presented in the SAMR met the minimum prescribed report requirements.

Staff revisited the 1 April 2008 SAMR staff comment letter and the Coalition's subsequent response to verify that the Coalition included the comments and recommendations in this SAMR. Staff determined that the Coalition considered those comments and incorporated them in this SAMR.

A. SAMR Component Name from Check List

1. Executive Summary

Page 1 of the Executive Summary incorrectly cites the Order numbers for MRP Order No. R5-2006-0007 and the Conditional Waiver Resolution No. R5-2003-0105. These should be cited as R5-2005-0833 and R5-2006-0053 respectively.

Staff verified that the Executive Summary included the required components of a brief summary of activities, monitoring results, and summarized conclusions.

2. Description of the Coalition Group Geographical Area

The SAMR reported the required watershed description elements: boundaries, climate, soil, hydrology, valuable aquatic resources, beneficial uses, and water body size designation.

3. Discussion of Data to Clearly Indicate Compliance...

During the reporting period, the Coalition conducted monitoring at all of its 15 monitoring sites for the 2008 irrigation season. Monitoring was conducted at six additional upstream monitoring sites. Marsh Creek at Concord Ave. was not sampled on 12 August because of dry conditions, which occur only on rare occasions.

On page 31, the SAMR tabulates the monitoring sites and the analytes monitored during the reporting period. On 14 December 2007, the Executive Officer approved the Coalition's request to discontinue monitoring of certain constituents at three sites because there were no exceedances for those constituents in a two or more year period. The approved duration of the suspended monitoring lasted until the end of storm season 2008, which falls within the SAMR reporting period. The following tabulates the stations and for which analytes monitoring was discontinued for the period:

Station Name	OP Pesticides	Pyrethroids	Water Flea Toxicity	Hyalella Toxicity	Minnow Toxicity	Algae Toxicity
Marsh Creek @ Concord Ave.	x	х	x			×
Mokelumne River @ Bruella Rd		. x			Х	
Terminous Tract @ Hwy 12		X		×		

The Coalition will need to resume monitoring for these in accordance with the core and assessment strategy outlined in its approved 2008 MRPP.

4. Copy of Chain of Custody Forms

The Coalition's Chain of Custody Forms submitted in the SAMR met the reporting requirements of the Order.

5. Field Data Sheets, Signed Laboratory Reports, Laboratory Raw Data The correct number of duplicates and field blanks were collected above the minimum 5% rate. All quality assurance (QA) and quality control (QC) analyses met acceptance criteria for the irrigation season at a level greater than 90%. This is tabulated in the table below. If the lab QCs were outside of acceptability criteria range, these sample results were flagged, as indicated in the Coalition's data appendix. The Coalition met all of the hold-times for all analytes except two *E.coli* samples. The overall QC acceptance percentage for the reporting period showed an improvement from the storm season SAMR QC reporting period.

	Field Blank	Field Duplicate	Method Blank	Lab Control Spike	Lab Control Spike Duplicate	Matrix Spike	Matrix Spike Duplicate	Lab Duplicate	Surrogate Recovery
% Acceptance	99	95	100	99	100	93	99	100	98

6. Actions Taken to Address Water Quality Exceedances...

Table 48 reports the Coalition's actions relevant to the exceedances from the irrigation season. The Coalition attended 18 grower outreach meetings informing growers of exceedances and management practices to implement. It also held meetings with individuals, agricultural commissioners, and pest control advisors. It would be relevant for the Coalition to indicate in the SAMR how many individual growers it contacted and how many it needs to contact in accordance with its September 2008 Management Plan. Although details of this kind of information must be presented in the Management Plan update, the SAMR could benefit from brief updates. Staff understands the approved Management Plan had only been active for a few months before the Coalition prepared the SAMR. Consequently, it is assumed that some of the information had not been collected to report.

The SAMR speaks to providing information on implemented management practices. Staff was not able to find what management practices were implemented in the Management Plan update, as the SAMR indicates on page 144. The Coalition must briefly include this information as part of its Management Plan update sections found in the SAMR.

The SAMR reports that the Coalition is presenting management practices to growers during the outreach meetings and that the Coalition is developing ways to track implementation of new management practices. Since the development tracking process is in progress, staff needs to be notified when the Coalition predicts the tools will be ready to track the implemented management practices.

The Coalition completed the required Exceedance and Communication reports during the reporting period. Each is included with the SAMR appendix.

7. Status Update on Preparation and Implementation of All Management Plans...
The Coalition prepared and submitted survey responses from its general surveys in a General Survey Report in December 2008 to record the management practice initial conditions. This provides a baseline so that the Coalition will be able to measure increases in Management Plan implementation.

A working list of management practices is tabulated in Table 46 and according to the Management Plan implementation schedule, implementation of new management practices will begin in April 2009.

Page 147 indicates that implementation of management practices occurred during the reporting period, and that this information will be included in the update to the Management Plan. Staff was not able to find any reference to specific management practices implemented in the 1 April Management Plan update report.

8. Conclusions and Recommendations

The Coalition's monitoring program objectives, (a) through (e), include the following:

- a) Determine the concentration and load of waste in discharges to surface waters.
- b) Evaluate compliance with existing narrative and numeric water quality triggers to determine if implementation of additional management practices is necessary to improve and/or protect water quality.
 - i. There were some QC issues for a small number of samples, but overall 90% or greater of the QC measurements met the requirements.
- c) Assess the impact of water discharges from irrigated agriculture to surface water.
- d) Determine the degree of implementation of management practices to reduce discharge of specific wastes that impact water quality in receiving waters of the Coalition region.
- e) Determine the effectiveness of management practices and strategies to reduce discharges of wastes that impact water quality.

Although the Coalition provided descriptions of how it met those monitoring program objectives, it may need to adjust its outreach strategies since the Coalition states on page 157 that the current strategy has not been as effective as necessary to reduce exceedances. Consequently, the Coalition will be implementing additional Management Plans for *Selenastrum*, *Ceriodaphnia*, *Hyalella*, copper, *E.coli*, DDT, DDE, DDD, and pH at various monitoring sites.

Since the report indicates that contacting growers individually could be slow, the Coalition is considering contacting commodity based growers in small groups rather than solely relying on one by one contact.

Annual Monitoring Report Review Checklist

Repo	Report Name: Semi Annual Monitoring Report 1 March 2009		Review	Reviewer Name:		Chris Jimmerson	on	
Subm	Submittal Date: 3/1/09		Review	Review Date: 5/18/09	/18/09			
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i en	Ac X	cepta	Unacce	Not Not	Not Applic-	(Section		
Z O	AMR Component Name			Included	able	#)	Comments	Notes
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Ŋ	Title Page	×						
ω	Table of Contents	×		٠.				
4	Executive Summary	×	<u> </u>				wrong Order#s	
51	Description of the Coalition Group geographical area	×			<u> </u>	12-May	- the state of the	-
6	Monitoring Objectives and Design	×				22		-
7	Sampling Site Descriptions and rainfall records for the time period covered under the AMR			×	:	13	Generalized rainfall records. Rcds not mentioned for the rpt period.	
æ	Location maps(s) of samping sites, crops, and land uses	×				16-19		
9	Tabulated Results of all analyses presented in tabular form so that the required information is readily discernible	×	,		-		Exceedances align with text. All data in appendix.	
10	Discussion of data to clearly illustrate compliance with the Coalition Group Conditional Waiver, water quality standards, and trigger limits	×			,		Included tables to illustrate compliance w/ WQL	
	Electronic data submitted in a SWAMP comparable format	×						
12	Description of sampling and analytical methods used	×				49-50	Tabulated methods	
13	Copy of chain-of-custody forms	×				AP. II	Found in appendices	
14	Field data sheets, signed laboratory reports, laboratory raw data	×				AP	Found in appendices	

Page

Annual Monitoring Report Review Checklist

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		_ _				Page #		
No.	AMR Component Name	Accepta Unacce		NI Not Applic-	Applic-	(Section		:
			7	ווכומתממ	מחני	ŧ	Comments	Notes
5	Associated laboratory and field quality control samples results	×				61-80	Tabulated QC results	
16	Summary of Quality Assurance Evaluation results	×				60,77		
17	Specify the method used to obtain flow at each monitoring site during each monitoring event	×				39	Instantaneous flow/load	
# 60	Electronic or hard copies of photos obtained from all monitoring sites, clearly labeled with site ID and date	×				Ap. VIII	194	N. C.
<u>0</u>	Summary of Exceedance Reports submitted during the reporting period and related pesticide use information	×				149		
20	Actions taken to address water quality exceedances that have occurred, including, but not limited to, revised or additional management practices implemented	×				145-152	Conducted 18 grower mtgs, some individual contact, PCA and Ag Com, contact.	
21	Status update on preparation and implementation of all management plans and other special projects		×			3, 100, 142, 144, 147	Pg 3 indicates MPs implemented, but not where or what. Then says 100, these will be presented in Mgt 142, 144 Plan update. Staff not able to find what MPs were implemented in Mgt Plan update. See Mgt Plan 4/09	
22	Conclusions and Recommendations					154-158		